

REMARKS

This Amendment is in response to the Office Action dated July 20, 2006. In the amendment, claims 9, 21 and 27 have been canceled without prejudice, claims ____ have been amended. Claims 3-6, 8, 10, 11, 18-20, 22-26, 28 and 29 remain pending in the application. Reconsideration of the pending claims in light of this amendment and the following remarks is respectfully requested.

These amendments add no new matter. A data distribution apparatus that generates special playback data by reading playback data according to a type of special playback and encoding the same, as well as inserting splicing data so as to avoid an overflow or an underflow in a buffer of a receiving terminal, is variously described in Applicant's specification as filed. For example, a description of these features includes but is not necessarily limited to that in FIGs. 3-4, ¶¶[0064]-[0069] and ¶¶[0074]-[0079] of the published version of this application.

Claims 3-6, 8-11 and 18-29 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,828,370 to Moeller et al. ("Moeller") in view of U.S. Pat. No. 6,658,199 to Hallberg ("Hallberg"), U.S. Pat. No. 6,029,045 to Picco et al. ("Picco"), and U.S. Pat. No. 6,965,724 to Boccon-Gibod ("Boccon-Gibod"). This rejection is traversed.

Independent claim 3 now recites: *[a] data distribution apparatus comprising:receiving means for receiving a request signal from an external source;*

data storage means for storing playback data;

data switching means for reading from said data storage means in response to the request signal received by said receiving means, and reading splicing data from said data storage means when switching between the playback data and a special playback data or preventing an overflow or an underflow in a buffer of a data receiving terminal;

transmission means for transmitting the playback data, the special playback data or the splicing data from said data switching means to the data receiving terminal via a transmission medium; and

wherein the data switching means generates the special playback data by decoding a special playback data by reading the selected playback data from said data storage means in

response to a type of special playback and encoding the decoded special playback data when the request signal indicates the special playback.

These claimed features are not disclosed or suggested by Moeller, Hallberg, Picco and Boccon-Gibod, whether taken individually or in any combination.

As previously noted, Moeller discloses a system and method for displaying a graphical icon on a display screen. A user manipulates a cursor within a slider bar using a remote control. The set top box receives and processes the signals and provides the information resulting from the user's action to a video server that delivers compressed video streams as dictated by the user's manipulation of the cursor.

Moeller fails to disclose various features of Applicant's claimed invention, such as (1) *"reading splicing data from said data storage means when switching between the playback data and a special playback data or preventing an overflow or an underflow in a buffer of a data receiving terminal,"* or (2) *"wherein the data switching means generates the special playback data by decoding a special playback data by reading the selected playback data from said data storage means in response to a type of special playback and encoding the decoded special playback data when the request signal indicates the special playback."*

The slider bar control of Moeller clearly offers no disclosure, nor does it offer any hint as to these claimed features. Moeller does not even generally disclose switching to selectively output playback data, special playback data and splicing data as claimed. It follows that Moeller also is devoid of any disclosure of insertion of the splicing data as the selective output for transmission to the buffer of the receiving terminal. At most, Muller discloses an index that points to different positions in a stream used for playback. This eases mode switching, but does not disclose or even suggest the above-described features.

Hallberg does not remedy the deficiencies of Moeller. Hallberg accommodates smooth trick play by reducing the number of frames in the trick play GOP until the system is capable of transmitting the trick play GOP within the constraints imposed for processing MPEG video in the forward mode at standard speed. (Moeller, 6:58-7:25). Hallberg merely teaches a reduction in the number of frames in the trick play mode to ensure that processing can be accommodated according to the standard mode constraints. Thus, Hallberg also clearly fails to disclose switching between playback data, special playback data, and splicing data, as well as features

related thereto, including but not limited to insertion of the splicing data so as to avoid an overflow or an underflow in a buffer of a receiving terminal as claimed.

Picco does not remedy the deficiencies of Moeller and Hallberg. Picco discloses a technique that allows a broadcaster to insert local content into programming content, so that the broadcaster can provide targeted content to its users. (See, *e.g.*, Picco at 2:49-58). A splicer is used to introduce the local content into the program content stream. To accommodate splicing, some reformatting of the stream is used. Specifically, the image frame immediately before and after the insertion point of the local content is formatted as an intra-coded “I” frame. (Picco, at 11:49-62). This avoids a destruction of the predictive encoding. (Picco, at 12:1-3).

Accordingly, Picco discloses a system where local content is inserted into the programming content. There is no switching between playback data, special playback data and splicing data as claimed by Applicant. There is also no insertion of splicing data so as to prevent an overflow or an underflow in a buffer of a receiving terminal as claimed by Applicant.

Furthermore, Picco merely splices similar data, albeit “local”, into the program stream, and thus does not deal with the same problem as Applicant’s claimed invention. With Applicant’s claimed invention, special playback data is encoded according to a type of special playback, and switching between playback, special playback and splicing data is provided, as is inserting the splicing data to prevent overflow and underflow. None of the references, including Picco, disclose such features.

Picco makes a general reference that the splicer “may also maintain the buffer flows, as described below.” (Picco, at 11:62-63). However, Picco offers no actual description as to how the splicer would maintain buffer flows. Moreover, Picco merely involves the insertion of local content into program content. By contrast, with Applicant’s claimed invention, there is switching between playback data and special playback data that is encoded from the playback data based upon the type of special playback that is involved. Picco offers no disclosure nor any hint or suggestion as to provision of splicing data in such a system, or provision of such splicing data so as or preventing buffer overflow or underflow.

Boccon-Gibod does not remedy the deficiencies of the other relied-upon references. Boccon-Gibod discloses a system for accommodating various reproduction modes for pre-encoded video. The system uses predetermined “jump points” that link encoded signals, so that

jumping between them during a reproduction mode may be accommodated. The jump points, and corresponding tables accommodate switching to and from various streams including playback and various trick play streams, as mentioned in the passages cited by the Examiner (e.g., 6:32-7:36). However, there is no apparent mention of switching between playback, special playback and splicing data, as claimed by Applicant. There is also no apparent mention of insertion of such splicing data so as to avoid a buffer overflow or underflow, also as claimed by Applicant. Accordingly, Boccon-Gibod does not remedy the deficiencies of Moeller, Hallberg, and Picco as described above.

Since even a combination of Moeller, Hallberg, Picco and Boccon-Gibod would still fail to disclose features that are recited in Applicant's independent claim 3, Applicant maintains that the Examiner has not presented a *prima facie* case of obviousness for that claim.

Applicant again notes that there would be no motivation to combine these various references in the proposed fashion. Moeller essentially discloses a slider bar control, and has no bearing on provision of playback and special playback data, and no mention whatsoever of splicing data insertion. Hallberg discloses a trick play frame reduction technique, but also has no mention of switching between playback, special and splicing data. Hallberg discloses techniques for inserting local content into program content. Finally, newly introduced Boccon-Gibod discloses jump points and corresponding organization of playback and trick play streams. None of the references disclose the above-described features of Applicant's claimed invention, and any proposed combination of these disparate references and teaching would clearly be an attempt to reconstruct Applicant's claimed invention in hindsight.

For reasons similar to those provided regarding claim 3 above, independent claims 5, 8, 10 and 11 are also neither disclosed nor suggested by the relied upon references. The dependent claims are also not disclosed or suggested by the relied-upon references, for their incorporation of the features recited in the respective independent claims, as well as their own separately recited, distinct features.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. § 103(a), as being unpatentable over Moeller in view of Hallberg, Picco and Boccon-Gibod.

For the foregoing reasons, reconsideration and allowance of the claims that remain in this application are solicited. If any further issues remain, the Examiner is invited to telephone the undersigned to resolve them.

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